

BRIGHT MILD STEEL/FREE-CUTTING RESULPHURISED STEEL-1214

RELATED SPECIFICATIONS:

Australia	AS 1443 – 2004 1214
Germany	W.Nr1.0715 9SMn28 11SMn30
Great Britain	BS970 – Part 1 – 1972 080A46
	BS970 – 1955 EN1A
USA	AISI 1213 and 1215
	ASTM A29/A29M – 91 1213 and 1215
	SAE 1213 and 1215
	UNS G 12130
Japan	JIS G 4804 SUM22

DESCRIPTION:

Free machining, resulphurised mild carbon steel bar containing maximum 0.15% carbon with low tensile and low hardenability. Usually used as supplied in the cold drawn or turned & polished condition. Bright round bar up to 63.5mm dia is cold drawn. Bright round bars 63.5mm – 100mm diameter are cold drawn or smooth turned & polished. Over 100mm are all smooth turned and polished. All square, and hex bars are cold drawn. Typical Tensile strength range min. is 370 – 480 Mpa.

APPLICATIONS:

Welding of this grade should be avoided due to high manganese sulphur inclusions, resulting in low strength welds. Can be carburised or carbonitrided. Suitable for components requiring extensive machining and strength is not a necessity. Gears, drive pinions and parts exposed to low-medium stress.

CHEMICAL ANALYSIS:

	C %	Si %	Mn %	P %	S %
Min.	-	-	0.80	0.04	0.25
Max.	0.15	0.10	1.20	0.09	0.35

SIZES AVAILABLE:

Round: (mm)

6.35	7.93	8	9.52	10	12	12.7	14.28	15	15.87	16	18	19.05	20	22
22.22	24	25	25.4	27	28.57	30	31.75	34.92	35	36	37	38.1	39	40
41.27	42	44.45	45	46	47.62	50	50.8	53.9	55	57.15	60	60.3	63.5	65
66.67	69.85	70	75	76.2	82.55	88.9	90	100	101.6	110	114.3	120	127	152.4

Hexagon: (mm - AF)

12.7	17.46	19	19.05	22.22	25.4	27	28.5	31.7	38.1	44.45	50.8	55	63.5	65
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Square: (mm)

6.35	9.52	12.7	15.87	19.05	25	25.4	31.75	38.1	50	50.8	63.5	76.2	88.9	101.6
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COLOUR CODE: ROSE PINK END

